

### **REMARKS**

This amendment is in response to the Official Action dated September 10, 2007. Claim 28 has been added; as such claims 1-28 are now pending in this application. Claims 1, 10, 18, 19, and 28 are independent claims. Reconsideration and allowance is requested in view of the claim amendments and the following remarks. No new matter has been added by this Amendment.

#### **Rejections under 35 U.S.C. § 101 Rejections**

Claims 1, 10, and 18-19 have been rejected under 35 U.S.C. § 101 based upon the allegation that the claimed invention is directed to non-statutory subject matter, particularly an algorithm.

Applicant respectfully submits that the requirements set forth in the Action are taken out of context, and are actually at odds with what is actually held in the *State Street* decision. In that regard, Applicant submits that the definition of statutory subject matter as set forth by the Examiner is decidedly narrower than what is required by the statute as interpreted by the Court of Appeals for the Federal Circuit.

In *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998), the Court of Appeals for the Federal Circuit stated that:

The repetitive use of the expansive term "any" in § 101 shows Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in § 101. Indeed, the Supreme Court has acknowledged that Congress intended § 101 to extend to "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 309, 65 L. Ed. 2d 144, 100 S. Ct. 2204 (1980); see also *Diamond v. Diehr*, 450 U.S. 175, 182, 67 L. Ed. 2d 155, 101 S. Ct. 1048 (1981).<sup>3</sup> Thus, it is improper to read limitations into § 101 on the subject matter that may be patented where the legislative history indicates that Congress clearly did not intend such limitations. See *Chakrabarty*, 447 U.S. at 308 ("We have also cautioned that courts 'should not read into the patent laws limitations and conditions which the legislature has not expressed.'" (citations omitted)). *State Street*, 47 USPQ2d at 1600.

With regard to the “mathematical algorithm” exception, the Court stated that, when applied to the evaluation of currency and when having clear application to reality and business, such methods recite statutory subject matter. Specifically, the Court held that:

“the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces “a useful, concrete and tangible result”—a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.”

*State Street*, 47 USPQ2d at 1601.

Finally, in dismissing the applicability of the Freeman-Walter-Abele test for determining what a claim is an unpatentable abstract idea, it is stated that:

“After all, as we have repeatedly stated, ‘every step-by-step process, be it electronic or chemical or mechanical, involves an algorithm in the broad sense of the term. Since § 101 expressly includes processes as a category of inventions which may be patented and § 100(b) further defines the word “process” as meaning “process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material,” it follows that **it is no ground for holding a claim is directed to nonstatutory subject matter to say it includes or is directed to an algorithm. This is why the proscription against patenting has been limited to mathematical algorithms . . . .’ ”**

*State Street*, 47 USPQ2d at 1602, quoting *In re Iwahashi*, 888 F.2d 1370, 1374, 12 USPQ2d 1908, 1911 (Fed. Cir. 1989).

Here, the claims clearly recite a practical application and are in no way directed to a mere mathematical algorithm. The disclosed steps of the method, as well as the results of “enhancing the liquidity of a tradable security” recited by Applicant, are clearly instances of a practical application, and not a mere abstraction. Moreover, performing the holding, retaining, determining, and offering, with respect to a security, clearly leads to useful, concrete and tangible results. Stating that the decision to offer or retain a security based on available information is not a useful activity implies that the creation of wealth and currency is not a useful result, but a mere mathematical algorithm. However, this reading is completely contradictory to the holding of *State Street*, where even the simple calculation of share prices was found to be a useful and concrete result. By

comparison, where the method in *State Street* only computed share values, the present method goes a step beyond by designating an action in accordance with the determines calculations. As such, under the definition set forth in *State Street*, the recited method is clearly “tangible, useful, and concrete” because it has clear financial application.

Accordingly, withdrawal of the rejections under 35 U.S.C. § 101 is respectfully requested.

Rejections under 35 U.S.C. § 112

Claims 1, 10, and 18-19 have been rejected under 35 U.S.C. § 112 for failing to point out and particularly claim the subject matter which applicant regards as the invention. In particular, the Office action asserts that “this language fails to distinctly claim applicant's invention because the scope of the claim is unclear, ‘what happens if the security is not squeezed’?----. Moreover the specification fails to clarify the meaning of the limitation.”

First, claim 1 recites “offering to the market a second portion of the holding during the squeezed other than for the purpose of effecting non-borrowing reserves...” As such, the fifth line of claim 1 only applies in cases where the security is being squeezed. While the nature of the fifth line renders the last step conditional, it does not render the step unclear. Furthermore, as a portion of claim 1, this step is clearly necessary for infringement and, therefore, for anticipation.

Support for such method claims are commonly found, for example, in *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1374–75 (Fed. Cir. 2003). In *Altiris, Inc.* the Court faced a claimed construction matter also including conditional steps and employed the conditional nature of the claims to set an implied order for the various steps. The court did not find any 35 U.S.C. § 112 issues with respect to the claim construction. Similar conditions are also common in methods reciting construction, where the steps require certain condition to occur in the production process for a chemical, such as measuring or performing a step at a given temperature.

The assertion in the Office Action that the “language fails to distinctly claim applicant's invention because the scope of the claim is unclear,” confuses the scope of the claim with an issue of clarity. Clearly, other actions can be taken if the security is not being squeezed, however, those

conditions are not within the scope of claims 1, 10, 18, and 19. That is, the claim only applies situations occurring “during the squeeze,” where a prior reference discloses performing the offering step when the security is squeezed.

Second, the Office Action asserts that the definition of what it means for a security to be “squeezed” is insufficient. The MPEP sets forth that:

In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a *whole to determine whether the claim apprises one of ordinary skill in the art of its scope* and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning to others as to what constitutes infringement of the patent. See, e.g., *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000)...

Accordingly, a claim term that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible. *Bancorp Services, L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372, 69 USPQ2d 1996, 1999-2000 (Fed. Cir. 2004)...

If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. 112, second paragraph, would be appropriate. See *Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1195 (Fed. Cir. 1993). However, if the language used by applicant satisfies the statutory requirements of 35 U.S.C. 112, second paragraph, but the examiner merely wants the applicant to improve the clarity or precision of the language used, the claim must not be rejected under 35 U.S.C. 112, second paragraph, rather, the examiner should suggest improved language to the applicant.

In the present application, the Office Action asserts that the term “squeeze” fails to particularly point out the subject matter of the claims; however, the Office Action also cites of a financial dictionary which defines the term “squeeze” in both the financial and investment markets. Furthermore, paragraph [007] of U.S. Publication 2003/0074300 (publication of the present application) defines the term “squeeze” :

The Repo Market can provide added liquidity in the event that a market for a particular security is squeezed. For example, brokers and dealers in a

particular security may attempt to capture a large portion of the market in that security on a particular date. In that event, the security may not be available at or near the market rate at which it or comparable securities are typically traded. This is referred to as going "special." **When a special occurs, the availability of the security in the market is referred to as being "squeezed."** This squeeze impairs the liquidity of the market for the debt. (See U.S. Publication 2003/0074300 of the present application)

Given that the term "squeeze" is defined similarly both in the specification as filed and in the general investment field, one of ordinary skill would be able to readily understand the metes and bounds of the claims.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-27 have been rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,101,353 to Lupien et al. ("Lupien") in view of the 4<sup>th</sup> Edition (1995) of the Dictionary of Finance ("DoF").

Applicant respectfully traverses this rejection.

Lupien discloses an automated system for managing large investment portfolios containing various cash and securities in the real-time environment (see abstract). Traditionally large portfolios had to be carefully managed due to the large market impact introduced by the purchase of large quantities of securities or the time consumed with the management of a large number of small quantities of securities. Lupien discloses a system that uses data processing equipment to place by and sell orders on securities using automated brokers to execute trades directly between users of the system and external markets (see abstracts).

DoF simply provides definitions from the term "squeeze" in reference to Financial and investment markets.

Claim 1 recites: *A method for enhancing the liquidity of a tradable security, comprising the steps of:*

*holding an issue of the security;*

*retaining a first portion of the holding;*

*determining when the security is being squeezed; and*

*offering to the market a second portion of the holding during the squeeze other than for the purpose of effecting non-borrowed reserves and to enhance the liquidity of the market for the security.*

With respect to claim 1, neither Lupien nor DoF teach or suggest “*retaining a first portion of the holding; determining when the security is being squeezed; and offering to the market a second portion of the holding during the squeeze other than for the purpose of effecting non-borrowed reserves and to enhance the liquidity of the market for the security.*”

Lupien only discloses a system for trading a large number of stocks automatically. In essence, the Lupien system allows a user to create a virtual trader that will continue to trade securities in a portfolio and manage all or part of the portfolio based on the predefined criteria. While the disclosed system may increase market liquidity by increasing the number of trades in securities, Lupien does not disclose any particular security trading strategy. As such, Lupien does not disclose a trading strategy employing squeeze securities or the buying or selling of only a portion of a given security holding. Instead, Lupien only offers an open-ended framework for automatically trading securities.

The Office Action rejects claim one by citing to column 2, lines 60-67 and column 3, lines 1-67. However, these citations only disclose the benefit of having automatic securities trades in light of the general cost of managing large portfolios containing numerous securities based on predetermined risk/return ratios.

The Office Action admits that Lupien fails to teach or suggest “determining when the security is being squeezed,” and cites to DoF as the basis for including the concept of a security squeeze for rejecting claim 1. However, the Office Action provides no basis or strategy in either

Lupien or DoF for employing a security squeeze to yield a profit. Furthermore, the Office Action provides no basis or strategy which divides and manages the holdings of a security in two separate portions.

Therefore, even a combination of Lupien and DoF would fail to teach or suggest “*retaining a first portion of the holding; determining when the security is being squeezed; and offering to the market a second portion of the holding during the squeeze other than for the purpose of effecting non-borrowed reserves and to enhance the liquidity of the market for the security.*”

For the reasons stated above claims 10, 18 and 19 also overcome the Lupien and DoF (although claims 1, 10, 18 and 19 should be interpreted solely based upon the limitations set forth therein).

Claim 2 recites: *The method according to claim 1, wherein the step of offering to the market a second portion of the holding further comprises the step of auctioning the second portion of the holding to a group of market participants according to a pre-determined bid range.*

The Office Action cites to the abstract, column 2 (lines 60-67), column 3 (lines 1-67), column 15 (lines 38-67), and column 16 (lines 1-35). However, none of these columns pertain to the buying and selling of securities in portions. Furthermore, none of these columns recite selling at a predetermined bid range. As set forth above, columns 2 and 3 discuss issues pertaining to the transactions involving large portfolios, while columns 15 and 16 simply include the first claim in Lupien directed to an automatic trading platform.

By contrast, claim 2 is directed to the process of offering the second portion of the market holdings at a predefined bid range, elements neither taught nor suggested by Lupien. Furthermore, the cited portion of the DoF fails to disclose these elements.

With respect to claim 3, Lupien does not teach or suggest “*a minimum bid set at a rate that is greater than or equal to about the rate for general collateral less about 175 basis points and not less than about 1%.*”

Again, the Office Action cites to the abstract, column 2 (lines 60-67), column 3 (lines 1-67), column 15 (lines 38-67), and column 16 (lines 1-35). However, none of these columns nor any portion of Lupien or the DoF teach or suggest *a minimum bid set* as disclosed in claim 3.

With respect to claims 4, 6, 7 and 8, Lupien does not teach or suggest that “the first portion varies between a range of about 25% to about 50% of the issue,” “the second portion varies between a range of about 10% to about 25% of the issue,” “the second portion comprises all of the first portion,” or that “the second portion comprises less than all of the first portion.”

Similarly to claims 2 and 3, the Office Action provides a blanket rejection, citing to the abstract, column 2 (lines 60-67), column 3 (lines 1-67), column 15 (lines 38-67), and column 16 (lines 1-35).

However, as set forth before, neither Lupien nor DoF provide a reasonably argument or strategy where the security holdings are sold in various portions in response to a squeeze.

Claim 9 recites: *The method according to claim 1, further comprising the step of repoing the second portion of the holding.*

However, neither Lupien nor DoF have any association with the concept of repoing securities. That is, the very concept of repoing securities is completely absent from the disclosure of Lupien, as Lupien only discloses the buying and selling of securities, not the repoing of securities.

For the reasons set forth above, neither Lupien nor DoF teach or suggest the various features of claims 1-9. For similar reasons to those set forth above, neither Lupien nor DoF claims 10-27.

Accordingly, withdrawal of the rejection of claims 1-17 is respectfully requested.



**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. FAN-0027/US from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

Christopher M. Tobin

Registration No.: 40,290

RADER, FISHMAN & GRAUER PLLC

Correspondence Customer Number: ~~2353~~

Attorneys for Applicant

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